UNIVERSITA' DI MESSINA
FACOLTA' DI SCIENZE

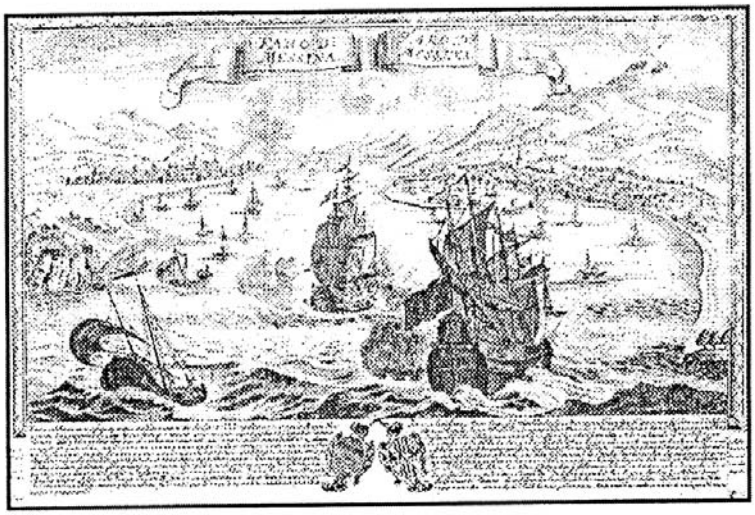
Dipartimento di Chimica Inorganica, Analititca
e Struttura Molecolare

Società Chimica Italiana
visione di Chimica Inorganica

Atti Accademia Peloritana dei Pericolanti
Classe I di Scienze Fisiche
Matematiche e Naturali

WORKSHOP ON PLATINUM CHEMISTRY

ABSTRACTS



MESSINA 30-31 MAGGIO 1994
Aula dell'Accademia

Atti Accademia Peloritana dei Pericolanti
Classe I di Scienze Fis. Mat. e Nat.
Vol. LXXII (1994) - Convegno 30-31 maggio 1994

CURRENT STATUS OF STRUCTURE-ACTIVITY RELATIONSHIPS OF PLATINUM ANTITUMOR AGENTS. COMPLEXES ACTING BY NON-CLASSICAL MECHANISMS

NICHOLAS FARRELL

Direct structural analogs of the anticancer drug *cis*-$[PtCl_2(NH_3)_2]$ (*cis*-DDP) in clinical trials have not shown significant improvement over the parent drug. A possible mechanistic explanation for this finding is that all analogs produce a very similar array of adducts to those of *cis*-DDP. Our group has explored the possibility that alteration of the mode of DNA binding of Pt complexes in comparison to *cis*-DDP may result in a different spectrum of antitumor activity. Two sets of complexes are currently under study - dinuclear "bisplatinum" complexes and the series *trans*-$[PtCl_2(L)(L')]$ ($L = L' =$ pyridine, $L = NH_3$, $L' =$ pyridine, thiazole and quinoline). This contribution summarises our chemical and biological studies on these new antitumor agents, which violate the empirical structure-activity relationships. Supported by American Cancer Society and Boehringer Mannheim Italy.

Department of Chemistry, College of Humanities and Sciences
1001 West Main Street Richmond, Virginia 23284-2006